

Claims listing:

1. - 6. (canceled).

7. (currently amended) A device for body fluid sampling usable with a cartridge housing a plurality of penetrating members, the device comprising:

a housing;

a penetrating member driver coupled to said housing and for use with said cartridge;

a penetrating member sensor configured to monitor position and velocity of at least one of said penetrating members;

a processor for controlling said penetrating member driver to move the at least one of said penetrating members at velocities which conform with a selectable velocity vs. position profile based on the monitored position and velocity of the at least one of said penetrating members from the penetrating member sensor.

8. (previously presented) The device of claim 7 comprising a cartridge housing a plurality of penetrating members and a window allowing a user to see the cartridge while the cartridge is in said housing.

9. (previously presented) The device of claim 7 comprising display showing device status.

10. (previously presented) The device of claim 7 comprising display showing lancing performance.

11. (previously presented) The device of claim 7 comprising display showing lancing parameters.

12. (previously presented) The device of claim 7 comprising a single button for actuating said penetrating member driver along an inbound path into tissue and then an outbound path out of the tissue.

13. (previously presented) The device of claim 7 wherein said penetrating member driver moves an active one of said penetrating members along a velocity

profile that reduces initial pain and residual pain.

14. - 31. (canceled).

32. (currently amended) A body fluid sampling device for use with a cartridge containing a plurality of penetrating members comprising:

a penetrating member sensor configured to monitor position and velocity of at least one of said penetrating members;

a penetrating member driver for moving an active one of said penetrating members from a first position outward to penetrate tissue at velocities which conform with a selectable vs. position profile based on the monitored position and velocity of the at least one of said penetrating members from the penetrating member sensor;

a display that has a screen saver.

33. (canceled).

34. (original) A fluid sampling device comprising:

a housing;

a cartridge defining a plurality of cavities, said cartridge sized to fit within said housing; and

a plurality of penetrating members at least partially contained in said cavities of the cartridge wherein the penetrating members are slidably movable to extend outward from said cartridge to penetrate tissue, said cavities each having a longitudinal opening providing access to an elongate portion of the penetrating member;

a sterility barrier coupled to said cartridge, said sterility barrier covering a plurality of the longitudinal openings, wherein the sterility barrier covering the lateral openings is configured to be moved so that the elongate portion may be accessed by the gripper without touching the barrier; and

a slider located on a surface of said housing, said slider movable in a linear direction to rotate said cartridge to bring an unused penetrating member into position for use;

a tooth gear coupled to said slider to control a distance said slider can travel;

a follower coupled to said slider;

a cam surface engaged by said follower to lift said cartridge a desired distance above a first position to allow for rotation of the cartridge without engaging a gripper used to advance the penetrating member.

35. (previously presented) The device of claim 34 wherein said cam surface is aligned parallel to said slider.

36. (previously presented) The device of claim 34 wherein said linear motion of the cam rotates the cartridge and moves a plunger to break the sterility barrier on the cartridge.

37. (previously presented) The device of claim 34 wherein cam surface comprise a linear strip of material with at least two raised portions and two depressed portions.

38. – 40. (canceled).

41. (previously presented) A device comprising:
a housing;
a penetrating member driver;
a cartridge containing a plurality of penetrating members;
a display on said cartridge;
a linear slider on the housing, said slider coupled to a rod;
said rod moving with said slider, said rod having at least one roller using the linear motion of the slider to rotate the cartridge, punch open a new cavity and load a new penetrating member.

42. (canceled)